

## Supplementary Information

### Anisotropically Structured Magnetic Aerogel Monoliths

Florian J. Heiligtag<sup>a</sup>, Marta J. I. Airaghi Leccardi<sup>a</sup>, Derya Erdem<sup>a</sup>, Martin J. Süess<sup>a,b,c</sup>, Markus Niederberger<sup>a\*</sup>

<sup>a</sup>Laboratory of Multifunctional Materials, Department of Materials, ETH Zurich, Vladimir-Prelog-Weg 5, 8093 Zurich, Switzerland, Fax: 0041 44 633 15 45; Tel: 0041 44 633 63 90; E-mail: markus.niederberger@mat.ethz.ch

<sup>b</sup>Scientific Center for Optical and Electron Microscopy (SCOPEM), Auguste-Piccard-Hof 1, 8093 Zurich, Switzerland

<sup>c</sup>Institute for Quantum Electronics, Department of Physics, ETH Zurich, Auguste-Piccard-Hof 1, 8093 Zurich, Switzerland

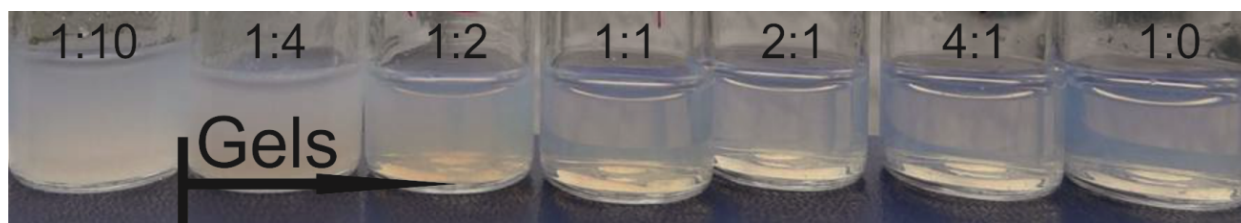


Figure S1. Dispersion (leftmost) and gels after induction of gelation with their respective water to ethanol ratios.

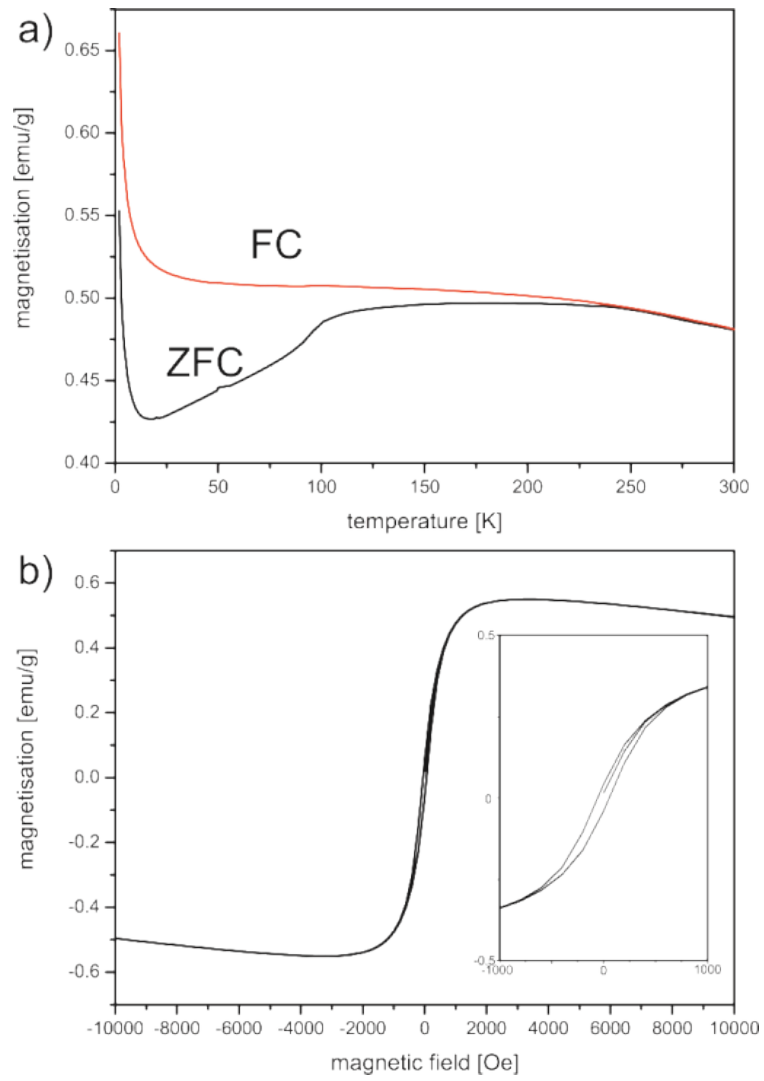


Figure S2. a) Field Cooling and Zero Field Cooling measurement and b) hysteresis measurement of an anatase aerogel containing 0.25 mol% Fe<sub>3</sub>O<sub>4</sub> nanoparticles.

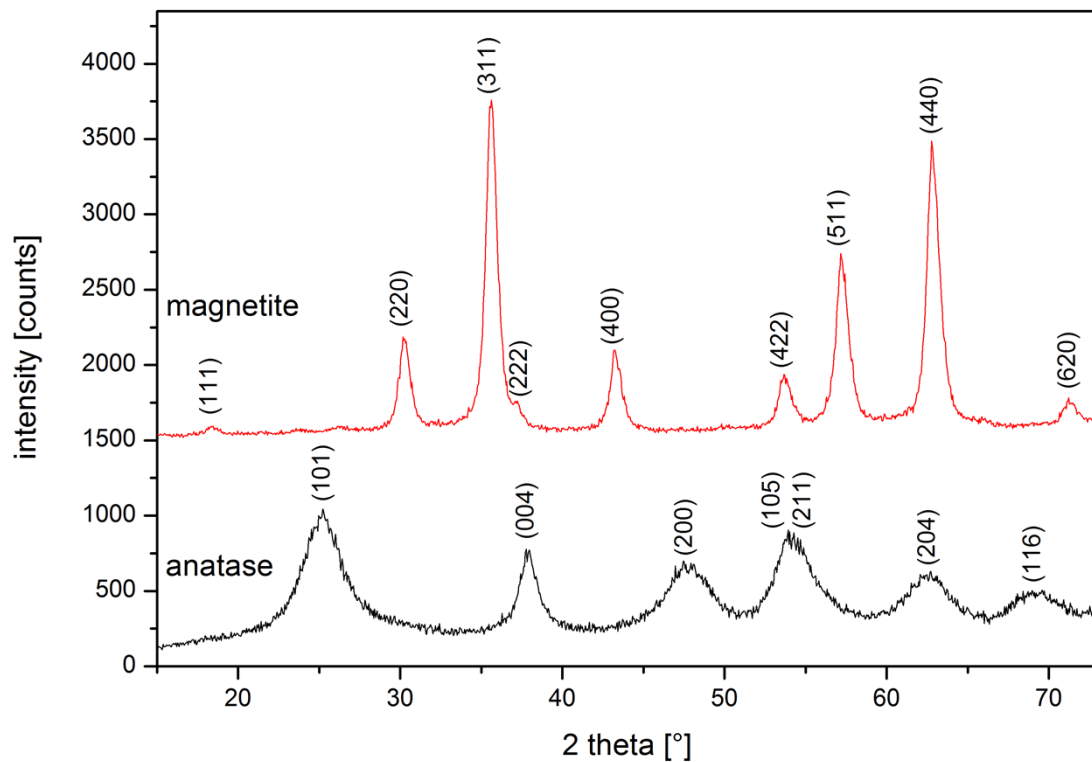


Figure S3. XRD patterns of the as-synthesized iron oxide (top) and titania (bottom) nanoparticles. The patterns can be assigned to the magnetite (ICDD File card No. 1-088-0315) and anatase phase (ICDD File card No. 1-70-6826), respectively. For clarity the magnetite diffractogram is shifted 1500 counts in positive y-direction.